DRAFT MEETING SUMMARY (v.2)

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HANFORD ADVISORY BOARD

HEALTH, SAFETY, AND ENVIRONMENTAL PROTECTION COMMITTEE June 13, 2001 Richland, WA

Topics in this Meeting Summary

Emergency Management – 24 Command Wildland Fire	1
HAMMER	
ISMS	7
Work planning	
Handouts	
Attendees	

This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

Emergency Management – 24 Command Wildland Fire

Issue Manager Doug Huston provided the committee with a brief introduction to the 24 Command Wildland Fire. It was started by a fatal collision on State Route 24 one year ago. The fire burned 164,000 acres and threatened several Hanford facilities and homes in Benton City. The Department of Energy – Richland Operations Office (DOE-RL) undertook a Type B accident investigation. The accident investigation board found that overall the fire had been well handled, but did identify four judgments of need, which are opportunities for improvement.

- 1) DOE-RL and DOE Office of River Protection (ORP) should evaluate existing emergency response processes and should review and revise deployment and personnel.
- 2) DOE-RL and DOE-ORP should review and revise emergency recovery operations, including emergency communications.
- 3) DOE-Headquarters' (HQ) Office of Emergency Response should assess the Federal Radiological Emergency Response Plan (FRERP), for inclusion of EPA independent radioactive monitoring for events and for limited deployment of the Federal Radiological Monitoring and Assessment Center (FRMAC), an agency that does aerial flyovers and helps with extra field teams, but must be planned ahead of time to use efficiently.
- 4) DOE-RL and DOE-ORP should improve the corrective action management system.

Another document generated after the fire was the "24 Command Fire Improvement Action Program Plan," which used the judgments of need and other feedback to establish

a plan ensuring the implementation of the recommendations. This document included a timeline and most tasks are to be completed late this year and early next year, although some extend to 2006. Issue Manager Pam Brown added that two other analyses had been completed: one by the Tri-County Fire Chiefs Association and one by the Fish and Wildlife Service (FWS). She introduced the following guest speakers: Glenn Johnson, Fire Chief from the City of Richland; Greg Hughes of the FWS, and Lorlee Mizell of Benton County.

Glenn Johnson: Tri-County Fire Chiefs Association

Glenn Johnson, Richland Fire Department, discussed the response of the Tri-County Chiefs to the fire. Mutual aid is encouraged in the Tri-County area, which includes 14 fire departments. When the fire began, there was a heavier than normal response, involving all of the Hanford Fire Department's on-duty firefighters and mutual aid from the Tri-County area. The fire grew incredibly quickly so they requested State mobilization, which would bring in resources from all over the state and is almost exclusively used for wildland fires. He pointed out that of all the mobilizations in Washington State, half take place in Benton County. He noted that one stumble in handling the fire was that once the fire moved off federal land, it became a second fire, a local responsibility. That had never happened before and led to confusion from both the federal and local firefighting officials. There are three types of fire management teams: type 3 is local management, type 2 is a combination of federal and state teams, and type 1 is a national fire. This fire progressed from type 3 to 1.

- A committee member asked if there had been a truck on the scene that could have extinguished the fire. Glenn Johnson responded that even if the eyewitness had the best equipment available, the fire's magnitude was so great that no fire official would have allowed him to fight it alone. This person did not have the proper equipment, but regardless the fire chiefs would not allow him to go out there he had no training, no radio, and was not integrated with the fire team.
- When the fire crossed the federal boundary, did the federal fire fighters stay inside the fence? Hanford Fire Department Chief Don Good answered that the Hanford Fire Department fought the fire, but when the fire started threatening the central Hanford site, they had to move back there. Other fire officials clarified that the HFD did not stop at the fence; the confusion in fighting the fire refers to which jurisdictions had the ability to order resources. Lorlee Mizell added that the confusion extended to the state level; the State emergency management team thought federal resources were already available.
- Did you compare the radio frequencies? Yes, that is one of the issues identified in this document. The Hanford Fire Department and Tri-County Fire Departments have radio frequencies that can talk to each other. Benton County fire services will move to an 800 MHz system, which Hanford Fire does not currently have, although it may be put it in. There is a problem state wide in communicating because there is only one statewide frequency. Another problem is that cell phone traffic is just point-to-point so the whole crew cannot hear communication at once. The fire review teams are looking at a broad-based regional approach.

Glenn Johnson reported that the Tri-County fire chiefs divided their program into short, medium and long-term problems. They have only attacked the short-term problems vigorously. The problems are not solved, but they are making progress on many of the 40 issues. There is a better understanding between various services (roles) now than in past.

- Do the Tri-County chiefs have any contact with the Department of Natural Resources (DNR)? DNR has a minimal presence in this portion of Washington State. The Tri-County chiefs use DNR to order state resources. The problem is that if a local department orders air resources it can destroy their annual budget in just one day.
- Is there confusion about who should communicate with whom? Yes. Sometimes there are competing authorities.
- There was a question about the misgivings firefighters had about possible release of radioactivity from the fire. What is the routine training to deal with radioactivity? City of Richland fire fighters get a base level of radioactivity training, but it is very minimal. The procedure is that firefighters called in by mutual aid must always be with a Hanford firefighter, who knows where it is and is not safe to drive. This is for security reasons as well.

Greg Hughes: U.S. Fish and Wildlife Service (FWS)

Greg Hughes, FWS, commented that lines of authority are needed to manage fires, not committees. He explained that communication is always a problem in a fire. On the initial attack, it does not matter whose jurisdiction it is. Triaging is necessary during the fight. For example, on the Hanford site it is best to let the most appropriately trained firefighters deal with radiological concerns. He commended the heroes who had fought the fire, and expressed relief that no one had been killed in the fire.

Greg Hughes then commented on the report the FWS prepared about the fire, noting that the FWS does not have enough money to address all of the lessons learned but is doing the best it can. He explained that the FWS did not have an adequate fire management plan at the time; it had only one fire staff (Thomas Skinner) then and now has a nine-person crew. The FWS is not required to send out its fire management plan for public review, but it did so and has received many comments.

Hanford fire records show that 90% of wildfires start along highways. The Hanford Fire Department used to do a burn line along the roadsides, but there are concerns about excess dust. The FWS is working on this issue. In the meantime, the FWS is spraying weeds to keep fuel down. It plans to conduct prescribed burning once it adopts a Fire Management plan.

• Is there now a coordinated, well-defined pre-fire program? Coordinated yes; well-defined coming along. We have addressed 40/48 of identified problems.

Greg noted that this year, the fire season is a month early because of the drought. The FWS has issued a fire order that there are to be no fires anywhere in the Monument, but he is concerned about the 4th of July. Mutual aid agreements are still being worked on.

Gerry Griffin: DOE-RL Improvement Action Plan

Gerry Griffin, Fluor Hanford, reported on the DOE-RL Improvement Action Plan. DOE-RL is integrating issues from all these events into a program plan, based on common themes from agency investigation reports. Then a schedule will be developed and all items will be evaluated on a monthly basis. He identified 170 items, which were grouped into 39 topics, although each item is still included. Some actions may take two years to bring to fruition, as they involve procedure changes and training. So far, DOE-RL has incorporated lessons learned into this year's plan, including lessons learned from other DOE sites and Tallahassee, Florida (since it experiences so many routine catastrophes like hurricanes and fires). In addition, DOE-RL has improved its electronic mapping capability, and now can bring live pictures into the Emergency Operations Center (EOC).

Challenges ahead are: optimizing the EOC staffing strategy, implementing the radio inoperability plan, completing revegetation west of the 200W Area to reduce dust, and fine-tuning sampling and analysis to understand low-level radiological air contamination.

• Did you work with the Tri-County chiefs? Yes, we were writing our documents simultaneously and shared issues and solutions.

Lorlee Mizell: National perspective

In November, Secretary Richardson formed a commission in fire safety preparedness. The commission was broken into four subcommittees; two are technical and two are more field oriented. Lorlee Mizell is on the field-oriented committees. One looks at emergency response to gage risks for fire fighters on-site and the other addresses risk communication, assessment, sampling, and how those are communicated to the public before, during, and after an incident. The work of this commission will not be finished until 2002. Right now they are doing site visits since its charge is complex-wide. They also want to make sure that large federal landholders are integrated. The Office of Independent Oversight will conduct an extensive fire safety review. It needs enough knowledge to draft an interim report and then a comprehensive plan.

Susan May: Washington State Department of Health (DOH)

Susan May, DOH, discussed health concerns from the fire. She clarified that the fire was a wildland fire, not a radiological incident, but people still feared the release of radioactivity. When the fire broke, there was a lack of DOH staff nearby, for a variety of reasons. She reported that DOH has good procedures for these types of events and needs to make sure it follows them and set priorities. She also said DOH received many questions about the health aspects of smoke. DOH environmentalists are assembling fact sheets about the fire.

Committee discussion

Doug Huston mentioned topics for future consideration: the fact that 50% of mutual aid state mobilizations involve this area and that fire fighters from other areas were nervous about going onsite to fight fires due to lack of radiological training. It might be a good idea to recommend that firefighters in eastern WA receive this training. Another topic is

the fire prevention aspect – firebreaks along roads. Doug felt it would be better to have a minor dust problem than burning fires.

Another committee member was concerned about the release of chemicals from the 300 Area, burial grounds and buildings, which were close to the wall of flames. He was particularly worried about the proximity of the fire to 300 Area buildings containing uranium hydrides. The Hanford Fire Department chief said that the chemical inventory is integrated into its plan and that there are boxes labeled with the National Fire Protection Agency's rating for flammability and reactivity. He also answered that the ability exists to monitor the escape of those chemicals.

The committee would like to learn more about the assurances provided to the public about the response to accidents and fires on the site, particularly about monitoring the air for isotopes. Penny Mabie pointed out that this topic falls under Emergency Management on the committee's work planning table, with the policy issue of making sure that the existing assessments are appropriate for emergencies. Doug Huston volunteered to collect information about atmospheric monitoring.

Other than details about environmental monitoring, the committee was pleased with the corrective actions being taken after last year's fire, noting that the groups involved appeared to be working well with each other. The committee decided that no further action was necessary.

HAMMER

Issue Manager Keith Smith summarized the history of the Hazardous Materials Management and Emergency Response (HAMMER) facility. It was established as a training center and its original concept has been expanded several times. Some of the advantages of HAMMER are that exposure to worksite hazards is reduced, it provides effective training for workers, and it allows the identification of hazards early in the work process. It also saves money to have a central training place. DOE and Fluor signed a contract outlining that HAMMER's operation would be bid out and the contractor would report directly to DOE. The new contract includes some change in focus for HAMMER, including marketing the facility more for onsite use. It is a priority to include all the Hanford site in HAMMER's purview, including DOE-ORP and contractors. The goal is to use the facility for 80% of the personnel in Hanford and to provide consistency of training.

Carolyn Ballard and Paul Krueger, both of DOE-RL, were present to answer the committee's questions about HAMMER. Carolyn Ballard explained that if HAMMER's budget were reduced to \$1 million, administration building and classroom would remain open, but the hands-on props would not be viable. This means that workers would sit at a computer desk for their training instead of fighting a live fire.

The committee asked if there is anything the Hanford Advisory Board (HAB) can do in addition to the advice it issued at the previous meeting. Paul Krueger suggested the HAB track consistency of training across the Hanford site, since that is the value of a site-wide

training center available to all contractors. A committee member reported that when she interviewed workers about training availability, many reported that training at HAMMER was important in their confidence to do their jobs safely. Another committee member suggested linking HAMMER with the Integrated Safety Management System (ISMS), since the larger issue is that protecting ISMS over time requires a facility like HAMMER. The committee also discussed issuing advice to non-Hanford entities, since taxpayers paid for the facility and it would be a shame not to use it.

- Would there be Tri-Party Agreement (TPA) compliance gaps if HAMMER closes? Carolyn Ballard answered that the facility would still provide the training as required by law, but the effectiveness would suffer. Paul Krueger said that where DOE-RL exceeds the minimum safety requirements, it would have to credit ISMS, the Voluntary Protection Program (VPP), worker involvement, and HAMMER. He would like to see HAMMER as a regional training center, but the internal philosophy is to provide hands-on training.
- Do off-site people receiving training at HAMMER pay the full fee? Yes. They pay tuition for the training class. The price for trainees from mutual aid agreements is 50% of the full cost.
- How is mutual aid defined? There are signed agreements.
- The original HAMMER budget request was \$5-6 million and currently HAMMER has been allocated \$1 million. What would you do with a \$3 million budget? Carolyn answered that they have run a budget scenario at \$2.5 million, which would allow the opening of a radiological training area. Many outdoor props would probably be lost since they are expensive to maintain and many are computer-driven.
- How much overhead could be built into charge rates? We cannot make a profit from outsiders, just full cost recovery.
- Why don't you charge Hanford people for using? Carolyn answered that doing so would impact other projects on the site, such as K Basins. Paul added that training prices would need to be low enough that DOE-ORP would not be driven elsewhere for training.
- Could you make mutual aid people pay more? No. Besides, 95% of users are from the Hanford site. Most of the mutual aid users are volunteer firefighters, so charging them does not make sense.

The committee discussed what it could do to help HAMMER, since it has already issued advice to DOE, copied to the congressional delegation. A committee member pointed out that DOE-RL decides funding for HAMMER since it is within the DOE-RL budget. It is not a specific appropriation in the President's budget. The committee decided to track the consistency and adequacy of training, learn about the new contract and performance indicators, and look for a metric to determine the impact of HAMMER's budget cut on baseline work. Issue Manager Keith Smith will continue to monitor the issue.

ISMS

Denny Newland (HAB) presented background information on the Integrated Safety Management System (ISMS) to the committee. The purpose of the presentation was to determine whether ISMS is an issue for the committee to review. A committee member pointed out that ISMS record keeping is at risk because of recent budget cuts. Denny Newland pointed out that ISMS is not currently an issue, but is something that could erode fairly quickly. He distributed a paper copy of his presentation (see handout "Integrated Environment, Safety, and Health Management System").

ISMS at Hanford is defined as the Integrated Environment, Safety, and Health Management System. ISMS is required for the entire DOE complex, including field offices and contractors. Slightly different terms are used at the various DOE sites, although it is the same fundamental safety management system. ISMS is broken into seven core functions that are supplemented by eleven guiding principles. A new feature recognizes the importance of worker involvement. There are defined expectations about how the functions and principles are translated into work.

The ISMS effort began in 1995 by a Defense Nuclear Facilities Safety Board (DNFSB) recommendation. The Secretary of Energy required all contractors and field offices to implement ISMS by October 2000. Beginning in 1995, DOE and contractors spent two years preparing for the ISMS verification, which occurred in two phases. Phase 1 included business budget and contracts, and verification that all proper documentation was in order. Phase 2 involved a review to verify that programs were being implemented in the field. A team of ten subject matter experts evaluated whether or not the safety functions were being carried out. For the case of DynCorp, Phase 1 and 2 were conducted simultaneously and the company was assessed against 15 objectives and 73 criteria. Denny emphasized that the companies invested a lot of energy in these reviews, which were a contractual requirement. Once the company passed ISMS it enters "Sustain and Maintain" mode, although the level of intensity in ISMS is still very high; the DOE-Headquarters organization responsible for independent reviews will be reviewing the DOE-ORP and contractor components of ISMS this summer. The Facility Evaluation Board results are available on the web.

Denny expressed his own view that the contractor work force and DOE work force have taken a step up to safety management and he has not seen it fall off in the year or so that it has been in place. He thought budget shortfalls will require an examination of resources spent just like anywhere else at Hanford, but it is a contractual requirement to maintain ISMS just as it is to do work.

Paul Krueger emphasized that DOE is also subjected to ISMS. DOE-RL failed in its first attempt to comply with ISMS then underwent a significant effort to upgrade its safety management system. At a second review 4-5 months later it passed. This experience helped DOE-RL understand how much work ISMS is for contractors.

Committee questions

- Is there an ISMS Program Manager in the company and to whom does that person report? Denny answered that for DynCorp, he was the ISMS program manager and he reported to the president of the company. The ISMS program manager is almost always a senior person, although other contractors may do this differently.
- What responsibilities does the ISMS Program Manager have? The contractor has an obligation to fulfill ISMS. The ISMS Program Mgr might not have the direct responsibility for making sure it is followed, but would be responsible for noting problems.
- Are there independent assessments of ISMS? Yes. There are internal then external assessments.
- What is the role of the DNFSB? To monitor activities at the sites and note any problems with ISMS implementation. Their approval is not required as a prerequisite for anything.
- Is the ISMS effort an update realignment or the production of a new binder no one uses? It was an update and an effort to get paperwork aligned.
- Is ISMS specifically named as a requirement in the safety regulations, or does the regulation only require that you have a worker safety program in place? ISMS is not specifically called out. But, because it is the system that management has accepted, it is regulated by the regulators.
- Have all contractors completed Phase 1 and 2? Yes.
- How do the reviews examine the Hanford occupational health process? How do the periodic reviews occur? Denny did not know how the Hanford Environmental Health Foundation (HEHF) maintains itself. A committee member felt the ISMS program should be well-integrated across the site and not just for HEHF.
- The committee asked Denny for his opinion on the impact of budget cuts on ISMS. Denny thought the contractors and DOE would maintain a viable safety management system. Paul Krueger echoed that opinion, and said the contractors may do less work, but would still meet safety requirements as defined by ISMS. Tom Logon, Bechtel Hanford, also agreed with Denny and pointed out that a budget cut would affect the amount of work done, not the way work is done, since ISMS is the *way* everyone works. He thought a guiding principle of ISMS should have been employee involvement, as it is in the Volunteer Protection Program (VPP).
- A committee member pointed out that if record keeping staffs are laid off, then there might be a risk for losing documentation.
- Doug pointed out that it is difficult for contractors to reduce the amount of work being done at Hanford as much of it is legally required by the TPA.

Most committee members were satisfied that ISMS would survive budget cuts, although a few worried that as an indirect cost, ISMS might suffer. One committee member recommended monitoring Industrial Hygiene services, since its budget is already stressed. Another member suggested following the effect on DynCorp's safety program as Fluor absorbs DynCorp's work scope. The committee agreed to monitor ISMS.

Work planning

Penny Mabie summarized the additions to the work planning table that had been identified during the meeting (see updated work planning table). No committee members volunteered to take over as Issue Manager for the Environmental Protection issue, so the committee's chair and vice-chair will try to recruit one. The committee cancelled its June committee call, but confirmed the call in July on the third Tuesday at 2 pm. Issue Manager Keith Smith will do some background work on the Site Infrastructure issue before the committee's July conference call.

Handouts

- Health, Safety, and Environmental Protection Committee Draft Meeting Agenda, June 13, 2001.
- Health, Safety, and Environmental Protection Committee Work Planning Table, April 12, 2001.
- U.S. Department of Energy Response to the 24 Command Wildland Fire on the Hanford Site June 27-July 1, 2000; Type B Accident Investigation. DOE/RL-2000-63.
- Gerry Griffin's presentation "24 Command Fire Action Plan Briefing" June 13, 2001.
- Lorlee Mizell's packet of information on the Commission on Fire Safety and Preparedness, June 13, 2001.
- Denny Newland's ISMS Presentation, June 13, 2001.
- HAMMER Training Props brochure

Attendees

HAB Members and Alternates

Pam Brown	Jim Curdy	John Erickson (phone)
Harold Heacock	Doug Huston	Charles Kilbury
Denny Newland	Wade Riggsbee	Dave Rowland
Dan Simpson	Keith Smith	John Stanfill
Tim Takaro	Jim Trombold	

Others

Carolyn Ballard, DOE-RL	Michelle Anderson-Moore,	Lorlee Mizell, BCES
	Ecology	
Keith Benguiat, DOE-RL	Fred Jamison, Ecology	Tom Logon, BHI
Judy Herz-Hamie, DOE-RL		Penny Mabie, EnviroIssues
Paul Krueger, DOE-RL		Christina Richmond,
		EnviroIssues
		John Cornetson, FH
		Gerry Griffin, FH
		Barb Wise, FH
		Don Good, Hanford Fire Dept.
		Bob Kirk, Kennewick Fire
		Dept.

Les Davenport, Public
Glenn Johnson, Richland Fire
Greg Hughes, U.S. FWS
Thomas Smith, U.S. FWS
Susan May, Washington State
Dept. of Health